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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/868,159	06/22/2001	Hilmar Niklaus		6149

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EXAMINER

MACARTHUR, VICTOR L

ART UNIT

PAPER NUMBER

3679

DATE MAILED: 06/27/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/868,159

Applicant(s)

NIKLAUS, HILMAR

Examiner

Victor MacArthur

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Information Disclosure Statement

The references cited in the Search Report by the EPO on 05/16/2000 have been considered, but will not be listed on any patent resulting from this application because they were not provided on a separate list in compliance with 37 CFR 1.98(a)(1). In order to have the references printed on such resulting patent, a separate listing, preferably on a PTO-1449 form, must be filed within the set period for reply to this Office action.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "two elements" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 17-23, 26 and 28-35 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 5810505 to Henriott.

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As to claim 17, Henriott discloses (Figs.1-4, 7 and 11) a detachable connection of two elements (48) comprising: a bolt (22) arranged between the two elements detachably connected; a tensioning body (54) for fixing said bolt at one end to one element of the two elements (48). The tensioning body is rotatable relative to the one element about an axis extending perpendicular to the bolt with the tensioning body being fixed in any rotational position relative to the bolt. There is a means (fig.2, reference character 46) for fastening the bolt to the tensioning body. The means for fastening is rotatable, with respect to the tensioning body, about an axis that is drawn through the center of means (46) and extends parallel to the rotational axis of the tensioning body. Figure 3 illustrates that the central rotational axis at the center of means (46) is distanced from the central rotational axis of the tensioning body and is parallel thereto. Figure 11 illustrates that there is nothing contained within the hollow cavity of the tensioning body to hinder the rotation of means (46) with respect to the tensioning body, as described above. The means for fastening includes a retaining head (46) detachably attached (40) to the bolt and being rotatable relative to the tensioning body.

As to claim 18, Henriott discloses (Figs.1-4, 7 and 11) the bolt (22, first end 38 and second end 38) having a second end opposite the first end with the second end of the bolt being fastened to the second element (48).

As to claim 19, Henriott discloses (Figs.1-4, 7 and 11) the bolt (22) having a second end (38) opposite the first end (38) with the bolt being fixed at its second end via an additional tensioning body (54) to a second element (48) of the two elements. The additional tensioning body is rotatable relative to the second element about an axis extending perpendicular to the bolt and further comprising an additional means for fastening the additional tensioning

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body to the bolt. The additional means (fig.2, reference character 46) for fastening is rotatable, with respect to the additional tensioning body, about an axis that is drawn through the center of the means (46) and extends parallel to the rotational axis of the additional tensioning body.

Figure 3 illustrates that the central rotational axis, at the center of means (46), is distanced from the central rotational axis of the additional tensioning body and is parallel thereto. Figure 11 illustrates that there is nothing contained within the hollow cavity of the additional tensioning body to hinder the rotation of means (46) with respect to the tensioning body, as described above. The means for fastening includes a retaining head (46) detachably attached (40) to the bolt and being rotatable relative to the additional tensioning body. The additional tensioning body is fixed in any rotational position relative to the bolt.

As to claim 20, Henriott discloses (Figs.1-4, 7 and 11) the bolt (22, first and second ends 38) penetrating at least one of the two elements (48).

As to claim 21, Henriott discloses (Figs.1-4, 7 and 11) the connection further comprising a third element (24) in addition to the two elements (48) wherein the bolt penetrates the third element arranged between the two elements.

As to claim 22, Henriott discloses (Figs.1-4, 7 and 11) the tensioning body (54) being accommodated in one element (48) fixing the tensioning body.

As to claim 23, Henriott discloses (Figs.1-4, 7 and 11) the retaining head (46) detachably connected to the tensioning body (54).

As to claim 26, Henriott discloses (Figs.1-4, 7 and 11) the bolt (38) accommodated in an axial cavity of the tensioning body (54), which is fixed in a longitudinal direction of the bolt.

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As to claim 28, Henriott discloses (Figs.1-4, 7 and 11) the bolt (38) penetrating an azimuthally extending slot of the tensioning body (54).

As to claim 29, Henriott discloses (Figs.1-4, 7 and 11) the tensioning body (54) having an axial end face (58), there extending between the axial end face and an azimuthally extending slot of the tensioning body, an axial slot (65) having a width greater than the bolt diameter.

As to claim 30, Henriott discloses (Figs.1-4, 7 and 11) a tensioning body (54) of cylindrical shape.

As to claim 31, Henriott discloses (Figs.1-4, 7 and 11) a retaining head (46) of cylindrical shape.

As to claim 32, Henriott discloses (Figs.1-4, 7 and 11) an element (48) open on an axial end face (at 52).

As to claim 33, Henriott discloses (Fig.11) a cavity of the tensioning body (54) open on an axial end face (at 58).

As to claim 34, Henriott discloses (Figs.1-4, 7 and 11) an element (48) closed on an axial end face (at 53).

As to claim 35, Henriott discloses (Figs.1-4, 7 and 11) a cavity of the tensioning body (54) closed on an axial end face (at 56).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 24, 25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5810505 to Henriott et al. in view of Stich et al. (WO 9732140 A2)

Regarding claim 24 and 27, Henriott discloses (Figs.1-4, 7 and 11) the connection of claim 17 with retaining heads (46) positioned at both ends of a bolt (22, first end 38 and second end 38) and extending in an axial direction of the tensioning bodies (54). The retaining head is accommodated in a cavity of the tensioning body. Henriott does not disclose that the retaining head contain a slot for engaging the bolt. Stich et al teaches (Figs. 7-11) a retaining head (27) containing a slot (28) extending in an axial direction of the retaining head and engaging an azimuthal groove (26) at both ends of a bolt (25). Stich et al further teaches (Fig.12) the retaining head (39) accommodated in an axial cavity of the tensioning body (32), which is fixed (Fig.8) in a longitudinal direction of the bolt. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the connection of Henriott to include the retaining head of Stich within the tensioning body for the purpose of improving bolt retention (fig.8 of Stich).

As to claim 25, Henriott discloses (Figs.1-4, 7 and 11) a bolt groove (44) being a surrounding annular groove.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Referring to bolt connections with retaining heads:

EP 0180965 A1 to Tashiro et al.;

WO 9429082 to Johnson et al.;

USPN 5590975 to Horntvedt; and

USPN 3851601 to Davis.

Referring to retaining heads with axis of rotation parallel to and displaced from that of tensioning bodies:

USPN 5788395 to Grieser et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor MacArthur whose telephone number is (703) 305-5701.

The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on (703) 308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9326 for regular communications and (703) 872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.


Lynne H. Browne
Supervisory Patent Examiner
Technology Center 3600

VLM
June 21, 2002